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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/598,098	08/17/2006	Takeshi Yamamoto	70404.106/ha	1025
54072 7590 11/13/2009 SHARP KABUSHIKI KAISHA C/O KEATING & BENNETT, LLP 1800 Alexander Bell Drive SUITE 200 Reston, VA 20191				
			EXAMINER	
			RUSHING, MARK S	
			ART UNIT	PAPER NUMBER
			2612	
			NOTIFICATION DATE	DELIVERY MODE
			11/13/2009 ELECTRONIC	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

JKEATING@KBIPLAW.COM

uspto@kbiplaw.com

pmedley@kbiplaw.com

Office Action Summary

Application No.

10/598,098

Applicant(s)

YAMAMOTO ET AL.

Examiner

Mark Rushing

Art Unit

2612

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 34-46 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 34-46 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 August 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SE/IB)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____
- Paper No(s)/Mail Date 8/17/06, 7/25/08, 12/23/08, 6/19/09, 7/8/09

DETAILED ACTION

1. This is in response to application filed on 6/19/09 in which claims 34-46 are presented for examination of which claim 34 is in independent form.

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 34, 35, 36, 40 and 45 of this application conflict with Claims 3, 5 and 6 of Application No.12/103,167. 37 CFR 1.78(b) provides that when two or more applications filed by the same applicant contain conflicting claims, elimination of such claims from all but one application may be required in the absence of good and sufficient reason for their retention during pendency in more than one application. Applicant is required to either cancel the conflicting claims from all but one application or maintain a clear line of demarcation between the applications. See MPEP § 822.

4. Claims 34 and 40 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over Claim 3 of copending Application

No.12/103,167. Although the conflicting claims are not identical, they are not patentably distinct from each other because both devices use:

- a. An onboard display device, comprising: a display section attached to an instrument panel of a vehicle
- b. The display section being greater in width than in height and having an aspect ratio that is equal to or greater than 7 : 3, the aspect ratio being a width/height ratio of a display area of the display section
- c. The display section including a first part in which a secondary image including information other than information of the vehicle is displayed
- d. A second part in which vehicle condition image including information of the vehicle are displayed
- e. A display control section controlling individual manners in which the display section shows the secondary image and the vehicle condition images, under control of said display control section, when the secondary image is displayed at an increased scale, and the vehicle condition images are displayed in a different manner

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

5. Claims 35 and 36 are provisionally rejected on the ground of nonstatutory obviousness-

type double patenting as being unpatentable over Claim 5 of copending Application

No.12/103,167. Although the conflicting claims are not identical, they are not patentably distinct from each other because both devices use:

- a. An onboard display device displaying the vehicle condition images in a different manner indicates displaying an image of a speed meter that is one of the vehicle condition images while changing the image from a circular-shape to a column-shape or numbers

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

6. Claim 45 is provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over Claim 6 of copending Application No.12/103,167.

Although the conflicting claims are not identical, they are not patentably distinct from each other because both devices use:

- a. A vehicle comprising an onboard display device

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

7. Claims 34, 35, 36 and 45 of this application conflict with Claims 1, 6, 8, 9 and 11 of Application No. 12/103,158. 37 CFR 1.78(b) provides that when two or more applications filed by the same applicant contain conflicting claims, elimination of such claims from all but one application may be required in the absence of good and sufficient reason for their retention

during pendency in more than one application. Applicant is required to either cancel the conflicting claims from all but one application or maintain a clear line of demarcation between the applications. See MPEP § 822.

8. Claim 34 is provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over Claims 1, 6 and 8 of copending Application No. 12/103,158. Although the conflicting claims are not identical, they are not patentably distinct from each other because both devices use:

- a. An onboard display device, comprising: a display section attached to an instrument panel of a vehicle
- b. The display section being greater in width than in height and having an aspect ratio that is equal to or greater than 7 : 3, the aspect ratio being a width/height ratio of a display area of the display section
- c. The display section including a first part in which a secondary image including information other than information of the vehicle is displayed
- d. A second part in which vehicle condition image including information of the vehicle are displayed
- e. A display control section controlling individual manners in which the display section shows the secondary image and the vehicle condition images, under control of said display control section, when the secondary image is displayed at an increased scale, and the vehicle condition images are displayed in a different manner

This is a provisional obviousness-type double patenting rejection because the conflicting

claims have not in fact been patented.

9. Claims 35 and 36 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over Claims 8 and 9 of copending Application No. 12/103,158. Although the conflicting claims are not identical, they are not patentably distinct from each other because both devices use:

- a. An onboard display device displaying the vehicle condition images in a different manner indicates displaying an image of a speed meter that is one of the vehicle condition images while changing the image from a circular-shape to a column-shape or numbers

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

10. Claim 45 is provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over Claim 11 of copending Application No. 12/103,158. Although the conflicting claims are not identical, they are not patentably distinct from each other because both devices use:

- a. A vehicle comprising an onboard display device

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 34, 35, 36, 40, 41, 42, 43, 44, 45 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakamura et al. (Nakamura; JP-A-H06-195056) in view of McCarthy et al. (McCarthy; US 6,477,464).

Regarding Claim 34, Nakamura discloses an onboard display device, comprising: a display section attached to an instrument panel of a vehicle (Abstract, [0006]-[0009]), said display section being greater in width than in height ([0010]), the aspect ratio being a width/height ratio of a display area of the display section, said display section including a first part in which a secondary image including information other than information of the vehicle is displayed ([0008], [0013], [0014], Fig 5b, A1), and a second part in which vehicle condition image including information of the vehicle are displayed ([0009], [0015], Fig 5b, A3); and a display control section controlling individual manners in which the display section shows the secondary image and the vehicle condition images ([0020], [0021], [0027], [0040]), under control of said display control section, when the secondary image is displayed at an increased scale, the secondary image appears partly on a part of a display area for the vehicle condition images (from Fig 4d to Fig 5b), and the vehicle condition images are displayed in a different manner (*there are many embodiments where the vehicle condition image is in a different manner, demonstrating the capability of the system*).

The description in the specification allows for changes in the display that are suitable to a

driver. It would have been obvious given the controlling means for the image ([0021]) and the motivation of improving visibility and safety (Abstract, [0035]) to have the capability to alter the image to a preferable state.

While the reference doesn't expressly teach an aspect ratio that is equal to or greater than 7:3, it does suggest ratios bigger than 4:3 including 16:9 ([0010]) and doesn't limit itself to that size ([0052]).

In the same field of endeavor, McCarthy discloses a mirror-based global-positioning system (GPS) navigation system on a vehicle. The interior rearview mirror assembly further includes a scrolling display. The scrolling display displays scrolling driver informational messages on the scrolling display. The interior rearview mirror assembly may include a global-positioning system display receiving an output from a global-positioning system receiving system and displaying turn-by-turn information to a vehicle driver. The reference teaches the use of a GPS with a display having an aspect ratio greater than or equal to 3 (Col 7 Lines 55-64).

Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify Nakamura with McCarthy as a matter of design choice using readily available components as an alternative embodiment.

Regarding Claim 35, Nakamura discloses an onboard display device, wherein displaying the vehicle condition images in a different manner indicates displaying an image of a speed meter that is one of the vehicle condition images that can change the image from a circular-shape to a column-shape (*From Fig 4h to Fig 5b*).

While the reference doesn't expressly teach changing a speedometer reading from circular-shape to a column-shape, both are displayed in Fig 4h. The description in the

specification allows for changes in the display that are suitable to a driver ([0040]). It would have been obvious given the controlling means for the image ([0021]) and the motivation of improving visibility and safety (Abstract, [0035]) to have the capability to alter the image to a preferable display.

Regarding Claim 36, Nakamura discloses an onboard display device, wherein displaying the vehicle condition images in a different manner indicates displaying an image of a speed meter that is one of the vehicle condition images that can change the image from a circular-shape to numbers (*From Fig 4h to Fig 5b*).

While the reference doesn't expressly teach changing a speedometer reading from circular-shape to numbers, both are displayed in Fig 4h. The description in the specification allows for changes in the display that are suitable to a driver ([0040]). It would have been obvious given the controlling means for the image ([0021]) and the motivation of improving visibility (Abstract) to have the capability to alter the image to a preferable display.

Regarding Claim 40, Nakamura discloses an onboard display device, wherein said display control section fixes one of vertical display lines of the secondary image at a left-hand side and a right-hand side of the secondary image and moves a vertical display line at an unfixed side so as to scale up the secondary image (*to go from the two images in 4d to the images in 5b there is a vertical line on the left that remains fixed and one on the right of the television image that changes so that the secondary image is scaled up*).

The description in the specification allows for changes in the display that are suitable to a driver. It would have been obvious given the controlling means for the image ([0021]) and the motivation of improving visibility and safety (Abstract, [0035]) to have the capability to alter the

image to a preferable state.

Regarding Claim 41, Nakamura discloses an onboard display device, wherein the vehicle condition images include at least an image of a speed of the vehicle ([0009]), and an image of an amount of fuel ([0009]), and the secondary image includes at least a navigation image ([0013]), a camera image ([0008]), and an image of information useful for a driver or a passenger ([0015]). However, the reference doesn't specify an image of the gear shift.

Paragraph [0015] suggests numerous vehicle conditions being displayed on an image, a gear shift indicator is a common reading on vehicle displays. It would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the device adding an image of a gear shift.

Regarding Claim 42, Nakamura discloses an onboard display system, comprising: an onboard display device; an imaging device taking images to and near the front, rear, right, and left of the vehicle ([0008], [0015]); and a control device controlling imaging operation of the imaging device so that a front image, a rear image, a right-hand image, and a left-hand image ([0021], [0040]) taken by the imaging device are capable of being all simultaneously shown on the display section of the onboard display device ([0035]).

Regarding Claim 43, Nakamura discloses an onboard display system, comprising: an onboard display device; an imaging device taking an image to and near the rear of the vehicle ([0008], [0035], [0041]); and a display control device of which the onboard display device is under control ([0021], [0040]), shows a widthwise elongated image to and near the rear of the vehicle as taken by the imaging device at an aspect ratio more than or equal to 4:3 ([0010]). However, the reference doesn't specify upon a selection of a reverse gear selected to back the

vehicle, showing a widthwise elongated image.

It would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the device so that upon a selection of a reverse gear selected to back the vehicle, showing a widthwise elongated image, in order to guard against running into unseen objects behind the vehicle. Since a driver often needs assistance to see behind the vehicle it would be a desirable function, because the field of vision is hindered to the rear of a car.

The limitation concerning a ratio greater than 7:3 is addressed with regard to Claim 34.

Regarding Claim 44, Nakamura discloses an onboard display system, wherein under control of the control device, the imaging device operates in response to an ignition-induced start-up of an engine, so that a front image, a rear image, a right-hand image, and a left-hand image are capable of being all simultaneously shown on the display section ([0008], [0015], and [0035]). However, the reference doesn't specify the imaging device operates in response to an ignition-induced start-up of an engine.

It would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the imaging device operating in response to an ignition-induced start-up of an engine, as often when a driver first enters a vehicle he usually has a concern for avoiding obstacles surrounding the car.

Regarding Claim 45, Nakamura discloses a vehicle comprising an onboard display device (Abstract, [0006]-[0009]).

Regarding Claim 46, Nakamura discloses a vehicle comprising an onboard display system (Abstract, [0006]-[0009]).

13. Claims 37, 38 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakamura in view of McCarthy and further in view of Breed (US 7,126,583).

Regarding Claim 37, Nakamura doesn't disclose an onboard display device, wherein the display section includes 468 or more lines as pixel rows.

In the same field of endeavor, Breed discloses an interactive display system for a vehicle including a heads up display system for projecting text and/or graphics into a field of view of a forward-facing occupant of the vehicle and an occupant-controllable device enabling the occupant to interact with the heads up display system to change the text and/or graphics projected by the heads up display system or direct another vehicular system to perform an operation. The device may be a touch pad. A processor and associated electrical architecture are provided for correlating a location on the touch pad which has been touched by the occupant to the projected text and/or graphics.

The reference discloses an onboard display device, wherein the display section includes 468 or more lines as pixel rows (Col 13 Lines 34-48).

Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify Nakamura and McCarthy with Breed as optimal resolution is a desirable option, granting significant advantages over other systems particularly in the resolution and optical intensity areas as suggested by Breed (Col 13 Lines 39-40).

Regarding Claim 38, Nakamura doesn't disclose an onboard display device, wherein the display section includes 1092 or more lines as pixel columns.

Breed discloses a display device, wherein the display section includes 600 pixels per column (Col 13 Lines 34-48).

Although the reference teaches 600 pixels per column, it is in the context that the more pixels in the column the more advantageous the image is to a driver. Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify Nakamura and McCarthy with Breed as optimal resolution is a desirable option, granting significant advantages over other systems particularly in the resolution and optical intensity areas as suggested by Breed (Col 13 Lines 39-40).

No evidence presented is convincing that the particular configuration of the display is significant or is anything more than one of numerous configurations a person of ordinary skill in the art would find obvious for the purpose of providing a clear display for Nakamura. See *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459.

Regarding Claim 39, Nakamura doesn't disclose an onboard display device, wherein the display section includes 468 or more lines as pixel rows and 1092 or more lines as pixel columns.

The limitation concerning number of pixels in rows and columns is addressed with regard to Claims 37 and 38.

Conclusion

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. Toffolo et al. (US 5,757,268) discloses a method prioritizing vehicle display features. If the necessary space exceeds available space, then the control goes through a routine wherein it attempts to minimize the size of the display items and prioritize them.

The control may select between available sizes for other items to provide additional space.

- b. Boone et al. (US 2005/0280524) discloses a vehicle entertainment and accessory control system. The control system provides a plurality of touch screens that present user interfaces concurrently with video windows.
- c. Yano et al. (US 5,731,979) discloses a map information display apparatus comprising a control unit, responsive to a signal informing that a predetermined area on a display unit has been indicated, for switching a display from a single map image on the screen to a state of displaying a first map image with the same scale as the single map image which has been displayed on the screen in a base screen region.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Rushing whose telephone number is (571)270-5876. The examiner can normally be reached on Monday-Friday 8:30AM to 5:00PM EST (Alt Friday).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel Wu can be reached on 571-272-2964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR

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system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/MR/

/Daniel Wu/
Supervisory Patent Examiner, Art Unit 2612